

**REMARKS**

Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority under 35 U.S.C. § 119(a)-(d), and for confirming that the certified copy of the priority document has been received at the Patent Office.

**Claim Rejections:**

Claims 1-6 are all of the claims pending in the present application, and currently all of these claims stand rejected.

***35 U.S.C. § 112, 2<sup>nd</sup> Paragraph Rejection - Claims 1-6:***

Claims 1-6 stand rejected under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph as being indefinite.

Applicant has amended the claims as shown in the previous section to address the Examiner's concerns with regard to these claims. Applicant submits that the claims are clear and definite, and hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 112 rejection of the claims.

Further, Applicant notes that the above referenced claim amendments have been made to merely clarify the claimed invention and are not intended to narrow the original scope or spirit of the claims in any way.

***35 U.S.C. § 103(a) Rejection - Claims 1-6:***

Claims 1-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,729,645 to Garito et al. in view of U.S. Patent No. 5,425,122 to Matsumura et al. In view of the following discussion, Applicant respectfully traverses the above rejection.

As an initial matter, Garito discloses an optical fiber with a core, having both inner and outer cores, a cladding layer, and a coating layer. Garito discloses that the outer core has a refractive index which decreases monotonically or gradually with the increasing radius from the boundary of the inner core. The Examiner is relying on the teachings in Garito which relates to the outer core layer, whereas the present invention is more accurately directed to the coating over the cladding layer (*see* claims 1 and 3). Applicant submits that teachings regarding the outer core layer of an optical fiber have little or no relevance to fiber coating layers.

Moreover, even if it were assumed that Garito's disclosures regarding the outer core layer were pertinent to fiber coatings (which is not Applicant's position), Garito only indicates that the outer core layer may include at least one organic polymer. This has little or no relevance to the coating of the present invention. Specifically, at column 3, lines 61-65, Garito indicates that the graded index profile in the polymeric outer core may be achieved by several methods, but there is no disclosure indicating that this is accomplished by having a level of incomplete cure. There is no indication of having "a coating over [a] central portion, [where the] coating comprises at least one partly crosslinked resin, wherein a level of crosslinking of [the] resin increases according to a radial distance from an internal surface of the coating which interfaces with [a] cladding section to an external surface of the coating." *See* claim 1. There is no disclosure, in Garito, of having the level of cross-linking increase as the distance from the center increases. In fact there is no disclosure, whatever, regarding the level of cross-linking in the outer core layer. Applicant submits that, unlike the present invention, one of ordinary skill in the art would be motivated to achieve 100% cross-linking in the outer core layer, and not be motivated to achieve

levels of uncured resin as in the present invention. Moreover, Applicant notes that there is little or no relation between the refractive index of a core layer and the cross-linking of a polymer resin in a coating.

Additionally, Applicant notes that even if one could equate a coating cross-linkable resin with the material used in a outer core layer, Garito discloses that the Index of refraction decreases as the radius from the center increases. However, Applicant submits that as the cross-linking increases, as the radius increases (in the present invention), the refractive index would also increase, and not decrease. Thus, even if one were motivated to cure the outer core layer as claimed in the present application, the resultant core layer would have the opposite characteristics of what is taught in Garito.

Further, Applicant notes that Matsumura discloses only a synthetic optical transmission medium, a waveguide having a crosslinked polymer structure core, but does not relate to a coating layer. Thus, Matsumura fails to cure the deficient teachings of Garito, discussed above.

In view of the foregoing, Applicant submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claim 1. Therefore, Applicant hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 103(a) rejection of claims 1 and 3. Further, as claims 2, 4-6, and new claims 7-8, depend on these claims, respectively, Applicant hereby submits that these claims are also allowable, at least by reason of their dependence.

**Conclusion:**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

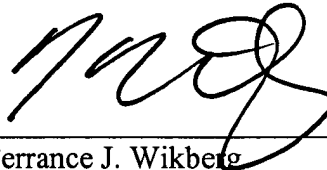
AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No.: 09/985,859

Our Ref.: Q66965  
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Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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